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IMPLEMENTATION OF THE CONVENTION

REVIEW OF REPORTS ON IMPLEMENTATION OF AFFECTED AFRICAN COUNTRY PARTIES, INCLUDING ON THE PARTICIPATORY PROCESS AND ON EXPERIENCES GAINED AND RESULTS ACHIEVED IN THE PREPARATION AND IMPLEMENTATION OF NATIONAL ACTION PROGRAMMES

Addendum

COMPILATION OF SUMMARIES AS PRESENTED IN THE NATIONAL REPORTS SUBMITTED BY AFRICAN COUNTRY PARTIES

Note by the secretariat

1. The Conference of the Parties, by its decisions 11/COP.1 and 5/COP.2, requested the secretariat to prepare a report based on the information contained in national reports, to be considered by the Conference of the Parties at its third session. Only African country Parties are required to present their reports to COP.3.

2. Decision 11/COP.1 provided guidelines and procedures for organizing and presenting the national reports and required in particular a summary of the national reports, not exceeding six pages.

3. This document contains the summaries of national reports submitted by seven African country Parties. The concerned countries are: Kenya, Lesotho, Libya, Madagascar, Malawi, Mali and Mauritania. The secretariat will also make this compilation of summaries of national reports available on the Convention's Web site (www.unccd.de) for wider circulation.

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CONTENTS

	Page
Kenya	3
Lesotho	12
Libya	14
Madagascar	22
Malawi	25
Mali	25
Mauritania	30

KENYA

1. THE STRATEGIES AND PRIORITIES ESTABLISHED WITHIN THE FRAMEWORK OF SUSTAINABLE DEVELOPMENT PLANS AND/OR POLICIES

Over 80 per cent of Kenya's total land surface is vulnerable to desertification. This same land supports 26-30 per cent of the total population; 50 per cent of the livestock sector as well as the wide variety of wildlife that form the basis of Kenya's tourism industry. At the national level, desertification and drought adversely affects 8-10 million people. It is for this reason that Kenya is fully committed to implementation of the provisions of the United Nations Convention to Combat Desertification (UNCCD).

A broad range of strategies to address the many problems associated with desertification and drought were already in place before the advent of the CCD. Indeed, the prevailing enabling environment in terms of political and policy guidance backed by a host of institutions provided the foundation on which many policy documents, programmes and projects were launched. These include sessional Papers on economic and natural resource management; the regular five-year Development Plans and Programmes/Projects on soil, water and forestry management.

The UNCCD however has provided Kenya with an appropriate framework within which to rationalize the interventions necessary to effectively combat desertification as embodied in the spirit of popular participation, partnership building and coordination. Thus, building on the strategies evolved before the UNCCD, Kenya has recently launched a range of initiatives, which includes the National Environment Action Plan (NEAP) (1993), the National Poverty Eradication Plan (NPEP) of 1999, the Environmental Management and Coordination Bill (1999) and the NAP to combat desertification.

2. THE INSTITUTIONAL MEASURES TAKEN TO IMPLEMENT THE CCD

The need for specific institutional arrangements and structures to facilitate a consultative and participatory process that would include the Government at all levels, local populations, communities and non-governmental organizations are still evolving in Kenya. The overall framework has been formulated and discussed at the 1st National forum. The present structures are therefore evolving towards that Framework.

The National Environment Secretariat (NES) is meanwhile the designated home of the National Coordinating Body (NCB). Although, NES was set up in 1974 to coordinate all environmental issues under a presidential directive, it still has no statutory legal status and enforcement powers of its own. It can only operate through various environmental acts.

Ideally, the NCB should operate under a land use policy framework, which is crucial to combating desertification. A land use policy would ensure proper coordination of sector issues in different ministries. Such a policy and plan is lacking in Kenya. However, the Environmental Management and Coordination Bill (1999) establishes the National Environment Management Authority (NEMA). NEMA thereafter will review and establish, in consultation

with the relevant lead agencies, a comprehensive land use policy and guidelines. This guideline would promote land use practices that will alleviate land degradation and increase food security.

Meanwhile in its efforts to operationalize the participatory approach concepts, the NCB has established a National Steering Committee (NSC). The NSC has formed various task forces to elaborate on pertinent issues in the NAP Process.

Presently, the NCB is a small three-person secretariat. The secretariat was strengthened in 1997 by UNSO in terms of basic office equipment, furniture and supplies. The NCB does not yet have a government budget line. It has no adequate communication and transport facilities necessary for efficient stakeholder coordination. However, the Government provides some basic requirements such as office space.

The NCB is transforming gradually so as to have intersectoral and multidisciplinary characteristics. At the national level, this intersectoral and multidisciplinary character is manifested in the NSC.

The NSC includes: relevant government ministries/departments; representatives from the local universities; the National Coordinating Committee (NGO) on Desertification-NCCD; NGOs; United Nations Organizations.

At the local levels, especially at the district and divisional levels, it is proposed that District Anti-Desertification Committees (DADCs) be constituted as subcommittees of the District Development Committees (DDC) structures. These have been constituted in four districts. The strategy is to adopt existing structures like District Environment Committees to have an adjusted composition, outlook and expanded mandate with a view to putting more emphasis and focus on desertification as a major environmental problem needing urgent solutions especially in the ASAL districts.

Historically the NSC is a successor of the formerly overwhelmingly government dominated Interministerial Committee on Environment subcommittee on Desertification and Drought (IMCE-DD). The NSC has nonetheless gained a multi-stakeholder characteristic in its composition. Gender mainstreaming even at the level of NSC is however still to be achieved. The current 1999 NAP Workplan has components for proactively promoting gender balance in the NAP processes structures.

The NSC meets at least quarterly and operates under an annual work plan. During the 1997/8 plan year, UNSO provided US$ 190,000 as seed money to start up the NAP Process (Phase I). This is in addition to US$ 30,000, which was for the formulation of the NDF. The NAP secretariat has put forward a budget of US$ 8.5 million for NAP Phase II.

Measures are being adopted to adjust or strengthen the institutional framework for coherent and functional desertification control. This is despite the fact that one of the greatest handicaps of the NAP is inadequate access to information and lack of communication facilities. Funds are lacking for connection, operation and maintenance of such systems as the Internet.

The mechanisms presently available for coordination and harmonization of actions at all levels has been reviewed both during the NEAP Project formulation and under the NAP. The NEAP review led to the all encompassing Environmental Management and Coordination Bill. The NAP more specifically focused on those institutions associated with control of desertification. This led to a proposed institutional framework for the NAP process. The National Forum discussed and adopted this institutional framework and also adopted measures to strengthen existing institutions and new structures at the local and the National level.

The main structures, whose capacity building have been looked into and which will continue to be strengthened to implement the NAP in the short and medium term, include: CBOs; DADCs; NCCD; NGOs; and NSC; as well as structures recommended to run the NDF or DCT. In an attempt to make the NAP coherent with other environmental strategies and planning frameworks, many analyses and reviews were done on land and natural resources management in strategic national economic and social development plans. This was done with a view to putting the UNCCD and NAP in the context of proper historical perspectives. The reviews led to a diagnosis of the future prospects based on the past experiences. However the NAP process can only be integrated fully in these larger National Economic and Social Development Plans after 2000, when the two can be synchronized.

Meanwhile some programmes in the country have started integrating the principles of the CCD. This includes poverty eradication programmes and the community wildlife conservation strategies of the Kenya Wildlife Service.

The Government's commitment to the UNCCD is demonstrated by the support it is giving to the development of the NAP process. And at the higher levels, it is involved in finding appropriate linkages with the SRAP and RAP, which are under development.

A comprehensive assessment of the legislation on environmental statutes has been done with a view to developing a coherent and functional legal and regulatory framework. The reviews have indicated that the legal provision for the protection and management of the environment and natural resources are scattered in 77 statutes governing land, water, forests and wildlife. However, Kenya's legal and institutional framework is set to rapidly change to meet the challenges of the new millennium, especially through the Environmental Management and Coordination Bill (1999). The Bill was as a result of intensive reviews and analysis of existing legislation on environment and management of natural resources, carried out under the NEAP which resulted in the Environmental Policy and the Bill.

The purpose of the Bill is to provide for the establishment of an appropriate legal and institutional framework for the management of the environment and natural resources including combating desertification. There is therefore high optimism that, once the Bill becomes law it will provide the framework for institutional arrangements for the implementation of the CCD.

Concurrently, a number of reviews are being undertaken on sectoral laws governing the management of the natural resources including the following: land tenure, forest act, wildlife act, and water act so as to be responsive to

the prevailing conditions in the country. The greatest influence is expected from the country's constitution's review, a process that is already underway. It is expected that it will reinforce further the proper management of the country's natural resources and the environment.

3. PARTICIPATORY PROCESS IN SUPPORT OF THE PREPARATION AND IMPLEMENTATION OF THE NAP

The preparation and implementation of the NAP to combat desertification and mitigation of the effects of drought in the context of the UNCCD calls for concerted efforts and effective participation of key actors involved in defining NAP process and priorities. This needs a strategy.

The key actors/stakeholders in the strategy include the following: Government and its various entities; NGOs working on aspects of combating desertification; CBOs working at the ground level to address the issue of desertification; private sector within or outside the communities who benefit from prudently managed environment; donor community; academia; and individual community members i.e. youth, women and men.

A strategy for communication and public awareness was developed by the NCB taking into account the main characteristics, strengths and weaknesses of the stakeholders. The strategy attempted to recognize specific structures for each of the stakeholders. However due to budget constraints, more generalized awareness raising campaigns were used to mobilize and ready the stakeholders for desired activities.

The inventory of the stakeholders was done first followed by an NGO/CBO needs assessment and capacity-building study. The results of this needs assessment were presented and discussed at the NCCD National NGO Workshop in order to arrive at a national consensus before being translated into a capacity-building action plan.

After the inventory of stakeholders, six regional stakeholder workshops were organized in the Western, Eastern, North Eastern, Central, Coastal and Nairobi regions organized by the NAP secretariat, in collaboration with NCCD, development agencies and government departments working in ASALs. A number of issues and concerns were identified during the workshop, which needed consensus and ratification so that they could be included in the NAP process at the 1st National Forum.

Task Forces comprising specialists from specialized agencies, government departments and NGOs were also constituted to consult widely, deliberate and prepare issue notes on various topics for discussion at the 1st National Forum. The NAP Process was launched during the 1st National Forum in October 1998.

A general evaluation of Phase I of the NAP Process was also discussed at length during the 1st National Forum and recommendation made for improvements in the WAY FORWARD for Phase II, based on experiences from the six stakeholder workshops; deliberations at the Forum; and the experiences gained from the seven Community Action Plans (CAPs).

During the process of defining the NAP priorities, it became obvious that there was gender imbalance in the representation of the stakeholders that were defining the priorities. However, there were more women from CBOs than any other grouping of stakeholders B but their ability to effectively articulate their views was unfortunately low in many ways. It is from this experience that a component has been included in the 1999 Workplan with the objective of proactively promoting gender mainstreaming in structures and programmes through capacity building of various institutions.

The National Steering Committee (NSC) has formed various task forces to ensure continuous consultations, effective and timely execution of actions as required in the implementation of the NAP and reporting their progress during the steering committee meetings for discussion, adoption and recommendations on the way forward.

The establishment of district focal points - District Anti-Desertification Committees (DADCs) was conceived after the workshop for community extension workers held in Eastern Kenya (Embu) in 1995. The objective of the workshop was to effectively carry out consultations with local communities with a view to influence decision-making at the district and national level. The result of this has been very positive in Phase I of the NAP in that a number of community initiatives have been supported in Samburu, Marsabit, Mwingi Makueni and Kitui, where some of the DADCs have been established.

The nature and scope of information, education and communications actions has been taking the form of regional, national and local consultative workshops where information is imparted and the exchange of experiences is done. This includes the effective use of the commemoration of the World Day to Combat Desertification (WDCD). Kenya has been commemorating the WDCD every 17 June since 1995. This is an important occasion when the whole country is focused on the problems of desertification and on the stakeholders' rededication to solve the problems.

The mode of designation of the representatives of the various categories to the local and national level forums is not well defined. This is the prerogative of the nominating organization/agency.

The extent of uptake of local concerns at the national level and results of the national consultations at the local level has been good considering the consultative process followed up to the 1st National Forum.

4. CONSULTATIVE PROCESS IN SUPPORT OF THE PREPARATION AND IMPLEMENTATION OF THE NAP AND THE PARTNERSHIP AGREEMENT WITH THE DEVELOPED COUNTRY PARTNERS AND OTHER INTERESTED ENTITIES

The degree of support and active participation of international partners in the preparation and implementation of the NAP in the context of the CCD has been low in Kenya probably due to certain aspects of their foreign aid policies. Thus programmes like combating desertification, under the UNCCD, although in principal accepted and ratified by both parties, are subjected to further conditionalities.

In addition, global economic recession has commonly also been used before to deny affected parties from getting new and additional funding beyond traditional sources.

In spite of all these drawbacks, the NAP secretariat has endeavoured to involve the donor community. This has included presentation of a NAP proposal to the Donor Coordination Committee for funding considerations. The members of this committee were also invited to participate in the 1st National Forum, but only a few attended. A few development partners, however, are actively involved in the NAP process. These include UNSO and UNDP. They have actively participated in all the stages of the process. The NAP also has had some financial and technical support from the Australian and The Netherlands Governments since 1997.

This is, however, not to say that there are not many development partners who have development programmes in the country in the area of combating desertification. Many of these programmes started before the advent of the CCD. However, not all embrace the principles of the CCD.

The NAP secretariat has also endeavoured to take steps to establish informal consultative and harmonization mechanisms for actions between partner countries for effective support and cooperation from international partners.

There presently exists a Donors Coordination Committee on Environment. The formation of this Committee was prompted by the ever-increasing pressure on land and degradation of the environment over the years in Kenya, and the need to address these environmental issues in an integrated manner. It coordinates donor aid and interventions on environment and conservation in general. This consultative forum was established for the donor aid partners at the national level. The Committee is supposed to meet quarterly but so far it has been irregularly.

However, the Committee is not specific for the CCD. Thus the 1st National Forum suggested the formation of a similar forum to specifically address itself to land degradation issues and specifically in ASALs at the national level considering the magnitude of the issue in Kenya. The proposal to formalize a donor consultative group was presented, discussed and adopted at the 1st National Forum. Its terms of reference were also presented.

At the district level, the 1st National Forum also recommended the establishment of the District Anti-Desertification Committee (DADC) that would comprise all stakeholders operating at that level including donors. Presently only three DADCs have been formed. Since many donors implement their country programmes at the district level it is hoped that this is where the donors will most actively and effectively be involved.

5. MEASURES TAKEN OR PLANNED WITHIN THE FRAMEWORK OF THE NAP, INCLUDING MEASURES TO IMPROVE THE ECONOMIC ENVIRONMENT, TO CONSERVE NATURAL RESOURCES, TO IMPROVE INSTITUTIONAL ORGANIZATION, TO IMPROVE KNOWLEDGE OF DESERTIFICATION AND TO MONITOR AND ASSESS THE EFFECTS OF DROUGHT

In the past, a number of activities have been undertaken in the field of combating desertification. Attempts have been made to diagnose and evaluate these activities and review past experiences in Kenya of drylands programmes and institutional arrangements with a view to using the experience to formulate appropriate actions in the NAP process. A particularly useful one was A Review of Existing Dryland Programmes in the Context of the National Action Programme Process in Kenya, for the Implementation of the Convention to Combat Desertification, done by the NAP process in 1995 with assistance from the Australian Government.

In June 1998, the NCCD and the NES contracted a consultant to undertake a needs assessment survey, based on existing and past situations in the NGOs and CBOs, with the objectives of: (1) identifying the capacity-building needs of NGOs and CBOs for the implementation of the CCD; (2) identifying the NGOs/CBOs that will be involved in the implementation of the CCD; and (3) developing a program of action for the capacity building of selected CBOs/NGOs. The result of this exercise was the document, engaging NGOs and CBOs in the National Action Programme.

Furthermore, EcoNews Africa and Environmental Liaison Center International (ELCI) and the NCCD in July-August 1998, undertook a comprehensive survey of key districts most affected by drought and desertification. All the major stakeholders were involved in the survey. The result of the survey was used in designing and publishing a guidebook for local communities to facilitate the implementation of the CCD. The guide in Kiswahili language, AKUKABILI KUENEA KWA JANGWA B Kitabu Cha Maongozi Kwa Jamii Za Afrika Mashariki.

These diagnoses were all used in making specific recommendations for the formulation of the NAP plus additional ones that were independently raised during the 1st National Forum.

Establishment of technical programmes and functional integrated projects to combat desertification is in progress. This has started with an inventory and review of ongoing projects involving natural resource management and in particular, combating desertification to assess their integration of the CCD concerns. The most comprehensive inventory of ongoing projects involving natural resources management and in particular desertification is just being completed by UNDP. This review includes who is doing what and where, in other words the geographical spread and contents of these projects and programmes.

The ASAL projects funded by The Royal Netherlands Government have been reviewed to assess their integration with most of the principles of the CCD. ETC East Africa BV was commissioned to do this review. The results of this review have led to the reformulation of the ASAL programmes to include principles of the CCD.

There are also a number of proposals for the integration of several ongoing projects into the NAP framework. Promoting Farmer Innovations (PFI) project in Mwingi is a good example. The primary objective of the PFI is promotion of sustainable community-based natural resources management engendered through the participation of Farmer Innovators (FI), researchers and extension agents, for developing and disseminating improved strategies of resource management. The PFI project in fact addresses several areas of the CCD especially Articles 16, 17 and 18 on "information collection, analysis and exchange", "research and development", and "transfer, acquisition, adaptation and development of technology".

A number of sectoral proposals have been made to integrate ongoing projects into the NAP process. These were made at the National Forum. They encompassed sectoral and cross-sectoral areas and included poverty alleviation and involvement of the tourism sector.

Community initiated projects are currently the only ones being implemented on the ground under the NAP process. The projects that were muted during the 1st National Forum are still in their formulation stage.

Priority has been given to strengthen the capacities of existing decision-making structures at the local level. This has been done through collaboration between the NAP secretariat and NCCD. At the selected pilot district level, District Anti-Desertification Committees (DADCs) have been established to facilitate liaison between the local and national level. Further strengthening of local capacities to combat desertification is being done through fundraising. The NCCD in conjunction with the NAP secretariat have fundraised for some catalytic funds to support pilot community projects which could then be more widely replicated. This support has been slow in coming and to date has been provided by UNSO/UNDP, the Australian and The Netherlands Governments as well as through the Combat Desertification and Mobilization Programme (CDMP) of EcoNews Africa to the Kenyan NCCD.

In Phase I of the NAP process the framework has been set for the elaboration and implementation of the priority action programmes identified during the consultative process and also set out in the Convention. Progress is however extremely slow due to lack of financial resources. The support for community initiatives and the establishment of DCTF are however the most advanced priority programmes.

Information gained during the process of defining the NAP priorities and that of the NGO/CBO needs assessment, together with the experience gained in the pilot community projects, confirmed that there is lack of effective management and lobbying capacities in CBOs and especially with womenfolk.

In recognition of these inadequacies and to be able to work effectively with affected grass-roots communities, Phase II of the NAP process will deliberately attempt to strengthen and enhance capacity-building activities for women through the local NGOs/CBOs structures. Meanwhile training done for individual pilot CBOs has been very encouraging.

The Convention emphasizes the virtues of partnership building. This is in order to avoid duplication and competition and increase the efficiency and

effectiveness of the limited resources. In the seven pilot community-based projects the NAP secretariat has been cooperating with locally-based NGOs and government technical departments to provide the technical support to the CBOs as well as providing the monitoring and evaluation services on behalf of the NAP secretariat. Such cooperation agreements have been drawn for each CBO with the communities, NGOs, development partners and donors.

6. FINANCIAL ALLOCATIONS FROM NATIONAL BUDGETS OF IMPLEMENTATION AS WELL AS FINANCIAL ASSISTANCE AND TECHNICAL COOPERATION RECEIVED AND NEEDED, IDENTIFYING AND PRIORITIZING REQUIREMENTS

Development planning in Kenya has over the years been influenced heavily by the need to address the twin problems of desertification and drought. This is indeed justifiable given the negative impacts of desertification on the social, environmental as well as the economic fabric of the Kenyan society. The planning has been on a sectoral basis as guided by sector-specific policies in place. Similarly, financial obligations of the activities have been administered on a sectoral approach.

Implementation of the activities to combat desertification has been the domain of a wide range of stakeholders ranging from the government line ministries, NGOs, CBOs to the donors. To finance the activities a wide range of mechanisms has been adopted. These include government contribution through national budgetary allocations; direct funding by NGOs; the self-help (harambee) movement; cost sharing between donors and project beneficiaries as well as financial arrangements at the bilateral and multilateral levels.

Financing the NAP process in Kenya is being undertaken through collaborative efforts by the Government, donors, and the affected communities. Phase I was implemented with contributions by UNSO/UNDP (US$ 230,000); the Government of Australia (US$ 10,000) and The Netherlands (US$ 5,000).

The Kenyan Government provided office space for the NAP secretariat as well as salaries and emoluments for the officers manning the NCB. Implementation of Phase II has been initiated using residual funds from Phase I.

Accessing adequate and assured funding for the NAP process poses a major constraint. To ameliorate the situation, donor financial assistance will be essential to enable operationalization of the proposed Desertification Community Trust Fund (DCTF) (US$ 40,000); expand support to community initiatives (US$ 6 million); mainstreaming gender issues into the NAP process (US$ 50,000) and elaboration of the sectoral and cross-sectoral programmes (US$ 40,000).

7. REVIEW OF THE BENCHMARKS AND INDICATORS UTILIZED TO MEASURE PROGRESS AND AN ASSESSMENT THEREOF

A comprehensive paper was prepared, presented and discussed on the need for and role of a national environmental information system in combating desertification in Kenya. It identified many facets and sets of data that are needed for the diagnosis and effective control of desertification. These sets of data are scattered in many organizations, in government, international

organizations and other private institutions. All are in different forms and formats and of varying qualities. It was proposed to strengthen the important and crucial institutions so as to improve their data sets and have the capacities to network and facilitate the exchange of the data and information.

An operational mechanism for the EIS was proposed and adopted by the Forum. The proposal is being elaborated for funding.

LESOTHO

1.0 An introductory section highlights the fact that Lesotho's land terrain is dominated by rugged mountains with only 9 per cent arable land, predominately in the lowlands zone. A brief overview of Lesotho's economic indicators is given, noting that the agricultural sector contributes about 14 per cent of GDP. This is the lowest agricultural productivity in the southern African region. Mention is also made of the principal development objective of the Government as being poverty alleviation. It is also emphasized that the country is threatened by desertification, because of soil erosion and land degradation. Soil is lost through water and wind effects. Loss of organic content and nutrients from the soil due to poor agricultural practices and various forms of biomass removal lead to reduction of soil water-holding capacity and decreased soil depth that hinders proper root development, and general damage to soil structure. Land suitable for cultivation and grazing is becoming more scarce. Lesotho is facing a major crisis of land degradation due to soil erosion.

2.0 Policies, strategies and priorities established within the framework of sustainable development plans are covered. Among other things, National Development Plans, and the National Plan to Implement Agenda 21 are outlined. The National Environment Policy that provides the national policy to ensure the protection and conservation of the environment with a view to achieving sustainable development for Lesotho; and strategies to combat desertification developed prior to UNCCD are also mentioned. In particular Land Use Policies which aim at achieving land use policy that is suited to the local climatic zone and soil type are elaborated. Therefore, policies have been developed for each of the major uses, namely:

1. **Agricultural Policy**

   The Government's agricultural policies are focused on increasing production and marketing of agricultural crops. Livestock and livestock products in a manner consistent with the conservation of the land base.

- **Livestock and Range Management Policies and Strategies**

  Aim at achievement of self-reliance and increased incomes for livestock owners and the Livestock and Range Management Policy states as its overall goal the protection and regeneration of the natural environment and the resource base.

- **Water Resources policy**

  Aims at achieving utilization of water resources that improve the economic and financial livelihood of the people by ensuring the quantity and quality of water resources.

3.0 Institutional measures taken to implement the convention are outlined as follows: The responsibility for coordination of the preparation and implementation of the National Action Programme is delegated to the National Environment Secretariat (NES), which becomes the focal point for the programmes. NES is to take urgent steps in the elaboration and implementation of the CCD programmes at the national level. In relation to the NAP process, the NES has become a government agency responsible for coordinating activities related to the preparation of the NAP document, implementation of programmes, monitoring and assessing the impacts of programmes. These measures are both considered important and complementary and should be carried out concurrently, as an integral part of programmes aiming at combating desertification in Lesotho.

Lesotho Environment Bill (1998) provides a basis for coordination of activities of different sectors and departments, and provides legal mechanisms for setting minimum standards for the protection of the entire environment. Such laws also provide mechanisms for regulating cross-sectoral issues, and for intervention in the enforcement of standards.

4.0 An outline is given on the participatory process in support of the preparation and implementation of action programmes to execute the NAP process. The establishment of NDSC in 1994 and a desktop study commissioned in the same year enabled the conducting and holding of district workshops with participation from district secretaries, principal chiefs, departmental heads at district level, district development committees, farmers associations, traditional heads and Members of Parliament. The climax was the holding of a national forum on desertification issues, in March 1998, whose output was the NAP Document.

5.0 In the interest of popular participatory approach all stakeholders were invited to participate in a consultative process in support of the preparation and implementation of the National Action Programme. Besides the continued support and commitment exhibited by the Lesotho Government, partnership agreements with some United Nations agencies and developed countries to implement the Desertification Convention was achieved. In this regard, the following cooperating partners have been very instrumental: UNDP, IFAD and CCD secretariats provided much needed financial support. UNSO assisted on community of Ha Khoro village pilot project with financial support for land reclamation activities.

6.0 Section 6.0 outlines measures undertaken to combat desertification and technical programmes in this field. Accelerated combating of soil erosion in Lesotho dates back to the 1930s. Until recently, such efforts mainly emphasized structural works such as terracing, contours, silt traps, diversions, etc. This strategy has been found to merely offer temporary solutions.

Government policy is now shifting towards biological conservation methods with a strong emphasis on community participation. To solicit the latter, the strategy now seeks to marry production with conservation and environmental objectives. Successful agricultural diversification and commercialization require the establishment of effective conservation and environmental protection measures. There is a need to adopt a holistic approach that integrates rural development with conservation and environmental planning, laying emphasis on acceptable and affordable techniques. This section also identifies planned measures within the framework of the NAP. These include the following:

1. To review the legal framework within which convention activities are implemented;

2. To investigate both physical and social factors that lead to the deterioration of the land base;

3. To intensify efforts in water harvesting by rehabilitating old ponds and dams and by constructing new ones;

4. To adopt a participatory resource management approach that places more emphasis on the farmer and the community as agents of development;

5. To consolidate and rationalize the operations of institutions that deal with issues of environment, conservation and land use; and

6. To strengthen the programme of conservation of endangered indigenous species.

7.0 Section 7.0 briefly identifies the national budget that has a direct bearing on desertification control. The total amount of about M 101 million (US$ 1 = Maloti 6.00) has been identified from the financial records of the Government and these reveal that this amount is the annual contribution by the Lesotho Government together with the donor community.

8.0 Lastly, a review of the benchmarks and indicators required to measure progress and assessment thereof have been identified. In this regard, it has been observed that desertification indicators are measurable and observable parameters that should permit the assessment of an area according to its degree of degradation. They may be either physical or socio-economic characteristics. So far the field level indicators of desertification in Lesotho have been suggested and will be further looked at before they are employed.

LIBYA

1. Continuing efforts

As in most countries, particularly those situated in the arid and semi-arid belt, agriculture and animal production in the Libyan Arab Jamahiriya are the economic activities most closely associated with issues of desertification and most affected by the different aspects involved; on the

one hand, they are entirely reliant on the fundamental elements of renewed natural resources and land while, on the other hand, the direct effect which they have on the status and productive capacity of these elements can be either positive or negative depending on the combination of a number of economic factors, social influences and environmental conditions and the interaction between them.

On that basis, the country's efforts over the past decades in the field of agriculture and animal production can be viewed as intensive efforts to combat desertification; allocations of over $15 billion were earmarked for these efforts, mainly to carry out a vast series of agricultural and rural development programmes and activities comprising the reclamation and development of some 2 million hectares of land and the implementation of 117 agricultural projects, including seven strategic production projects over an area of almost 40,000 hectares, with the aim of reducing the division between production and the growing demand for food from inhabitants, whose numbers were steadily increasing at an annual rate of 3 per cent.

These projects also included the establishment of villages and settled communities based on farming and grazing activities. To that end, 75 settlement projects, comprising 22,000 farms, were set up with the aim of developing rural areas and creating new opportunities for employment offering a satisfactory income and a decent living standard, thus encouraging reverse migration and settlement. Equally, they aimed to ensure a constant increase in the size and diversity of agricultural and animal production.

The development programmes and activities carried out also included significant practical action with a view to maintaining and protecting the environment, safeguarding essential natural resources and improving land productivity. For the most part, this action consisted of extensive measures for the afforestation of some 250,000 hectares of land with different purposes in view, as well as the development of natural pastureland over wide areas covering in excess of 2.5 million hectares, the implementation of intensive soil conservation measures by establishing projects over an area of 192,000 hectares in the mountainous regions in order to combat erosion by water, and the stabilization of moving sand dunes, using oil derivatives and mechanical methods, for conversion into green belts. Water development projects were also established as part of these programmes and activities, including steps for the utilization of surface water; in addition to the construction of thousands of reservoirs and tanks, 16 major dams with an estimated annual storage capacity of 300 million cubic metres were constructed and over 100 million cubic metres are treated annually for reuse in agricultural purposes. Moreover, two nature reserves and five national parks were established in several outstanding environmental regions, covering a substantial area of 134,000 hectares in all. As a final adjunct, a cohesive and uniform body of laws and legislative acts was passed, together with a number of ancillary and supplementary rules.

In brief, these programmes and activities produced an increase in plant and animal productivity throughout the whole area. Self-sufficiency was also achieved, together with surpluses of most crops. The overall performance of agriculture and animal production was therefore confident in keeping pace with the population growth and the growing demand for food and in providing new employment opportunities, which showed an annual increase of 2.1 per cent.

Both activities achieved a production growth rate of 15 per cent and their contribution to the gross national product (GNP) rose to more than 5 per cent each. As such, these efforts were promoted to the level of a singular experiment, in which context the Libyan Arab Jamahiriya was ranked during the 1960s and 1970s as a world pioneer in the field of combating desertification.

2. Major challenges

It was inevitable as a concomitant of the improved economic conditions and the rise in population income levels that adverse pressures and influences should emerge to overshadow the progress and direction of the Libyan experiment and prevent the achievement of its intended objectives as desired. Such pressures and influences were a direct repercussion of circumstances imposed by the nature of the era and the requirements and aspirations for development thus demanded. As a result, essential natural resources and land were exposed to various forms of pollution, strain, degradation and waste partly created by a combination of different factors, circumstances and parties and the interaction between them.

The current environmental limitations are attributable to the elements of the desert climate, which played a substantial role in determining land uses and in forming the sensitive water balance rarely achieved in most areas owing to the fluctuating rainfall averages and seasonal rainfall variations, the quantity of water available annually being estimated at about four billion cubic metres. Under the effect of these limitations, the various drought factors produced specific chemical properties and soil which is naturally and characteristically fragile. The agricultural land base was therefore limited to not more than 2 per cent of the country's total area. Moreover, these factors had implications for the composition and distribution of the natural plant cover, which produces enough to satisfy only a modest 35 per cent of animal food requirements.

Desertified areas and areas under threat of desertification: percentage of desertified areas overall according to degree of desertification

Slight desertification (per cent)	Moderate desertification (per cent)	Intense desertification (per cent)	Extremely intense desertification (per cent)
0.5	28.3	48.4	22.8

Source: "Environmental effects of agricultural development", Arab Organization for Agricultural Development, 1991.

With a view to stemming the food gap and keeping pace with the increasing demand for food and proper employment opportunities, more intensive farming was carried out in some areas and wider areas of marginal land were also cultivated, demanding the use of considerable water resources, as well as the introduction of a greater number of technical methods and external inputs. Additional pressures were therefore exerted on essential natural resources and land, as a result of which the processes of desertification multiplied and accelerated, as clearly indicated by the fact that the underground water in some of the main reservoirs under consistently heavy drainage started to run

dry and turn increasingly saline. An annual deficiency was thus produced between the natural water supply and the quantities exploited; it is estimated, for instance, that over one billion cubic metres are annually taken from the reservoir on the Jafara plain, where the farming activity uses up a share equivalent to almost 80 per cent of the total consumption. Moreover, the plant cover is diminishing, woodlands are being turned to agricultural uses at an average of 2,500 hectares per year, the soil is constantly losing its fertility and over 1.5 million hectares of farming and grazing land are being increasingly eroded due to the widening and excessive use of technical methods and agricultural machinery and the fact that cultivation has extended to include marginal land with annual rainfall averages of between 100 and 150 millimetres. In addition, the land is now overgrazed due to the six-fold growth in the number of animals during the last half of the century, wildlife has diminished in both amount and diversity, and over 25 per cent of highly fertile land has been consumed by the creeping expansion of urban areas, where the average population growth now stands at 8 per cent as opposed to 1 per cent in rural areas, continuing to pose the major challenge for the future of farming and grazing activities at a time when demand persistently outpaces production.

Proportion of arable land to tractors

Year	1960 1985	1965	1970	1975	1980
Hectares per tractor	885 76	776	694	155	148

Source: World Conference on Agrarian Reform and Rural Development, 1990, Food and Agriculture Organization of the United Nations.

Projected impact of urban expansion on agricultural land in the year 2000

Category of land	Urban land area and its projected share in hectares of agricultural land according to category in the year 2000	
Category 1	1 350	(46.8 per cent)
Category 2	27 800	(15.6 per cent)
Category 3	30 300	(4.2 per cent)
Category 4	9 450	(2.4 per cent)
Category 5	19 000	(1.1 per cent)
Total urban land area	97 900	

Source: "Environmental perspective to the year 2000", National Scientific Research Organization, Technical Centre for Environment Protection, 1992.

Despite the various pressures imposed on the base of natural resources and land, affecting their productivity, it is nevertheless possible to curtail them through rapid and radical solutions based essentially on legal regulation and rationalization, which are also likely to alleviate the severity of the present environmental limitations. The potential for intensifying agriculture and animal production and increasing their productivity is encouraging in areas where the environmental factors and conditions are good. Increasing rates of desertification, however, are being experienced in many areas, as demonstrated by the degradation and depletion of natural resources, the shortage and poor quality of water, the reduction of agricultural land, the fall in its productivity and the continuing rural exodus to urban areas as a result of the lack of potential, resources and sufficient investment in rural areas. These issues will continue inexorably to impose themselves in the face of the population growth, the growing food demand and the trends in the workforce, and are significant in that land and water are the two basic resources, as well as the mainstay of agriculture and animal production, both now and in the future.

3. **Major factors**

Future estimates and forecasts indicate that, in the year 2025, the number of inhabitants in the Libyan Arab Jamahiriya will exceed 10 million, more than 90 per cent of whom will inhabit urban areas, including 70 per cent in the major towns. On the one hand, this predicted rise in population will exact the more rapid achievement of a steady increase in agricultural and animal production, while on the other, it will lead to urban expansion at the expense of farming land, with a loss of over 45 per cent of highly fertile land. These same estimates and forecasts also indicate that, in 2025, over 60 per cent of today's inhabitants will still be alive and feeling the extent of the problems endangering these natural resources and threatening the land on which they are to depend for their future food production and supply. Their economic and social interactions will therefore play an essentially valuable and highly influential role in determining the overall framework for the future of agriculture and animal production and in mapping the outline for their productivity over the next century.

In view of this predicted increase in population numbers and the current trends in the workforce, and with reference to the susceptibility of the natural resources and the limited area of agricultural land, the accomplishment of the main objectives of sustainable development, including food security and the satisfaction of its requirements in such a way as to sustain "the material and economic ability of all individuals to obtain food at all times", will demand the pursuit of development methods that seek to comply with three key factors which are both interrelated and conflicting at the same time:

1. **The first factor** is the demand for food. The currently prevailing approach is both rational and sound, prescribing as it does that the available resources and land - whether already farmed or with farming potential - are essentially limited. Consequently, they should be used in the most ideal and integral way to produce food with a view to meeting essential human needs, which are now beginning to increase as a result of the natural growth in population numbers and the improvement in living standards.

2. **The second factor** is related to workforce trends, since the availability of employment opportunities that provide an adequate income sufficient to guarantee a decent standard of living for the inhabitants of rural areas who rely on farming and grazing activities will become an issue in itself in the future, given the rising flood of job-seekers measured against the susceptibility of resources and the limited amount of land, as well as against the rapid development and spread of the technologies in use.

3. **The third factor** is concerned with determining the opportunities available for the utilization of resources and land. The susceptibility and limited amount of resources and land constitute major obstacles. In order to guarantee achievement of the objectives and requirements of sustainable development, it is therefore essential to provide more equal opportunities for the utilization of those natural resources and land so as to guarantee the food supply for the increasing numbers of inhabitants and provide them with employment, especially in the case of those living in the most vulnerable areas.

Growth in wheat requirements to the year 2000

Year	Number of inhabitants (thousands)	Wheat production (thousand tons)	Amount consumed (thousand tons)	Food gap (thousand tons)	Percentage of self-sufficiency
1990	4 202	185	682	427	27 per cent
1995	5 112	185	830	645	22 per cent
2000	6 220	185	1 010	825	18 per cent

Source: "Wheat and barley: Facts and figures", Salih Al-Hamali, Sasi Harraqa et al, Agricultural Research Centre, 1992.

Total workforce and agricultural workforce

Year	Total work (thousands)	An agricultural workforce (thousands)	Percentage
1974	531	122	23
1980	723	156	21
1987	1 023	151	15
1988	1 059	153	14
1995	1 094	154	14
1996	1 224	219	15

Source: Arab Agricultural Development Organization (series of volumes on agricultural statistics).

GENERAL FRAMEWORK OF THE NATIONAL PROGRAMME (INFLUENCING FACTORS AND LIMITATIONS)

1. Variety of choice

Under the present situation, farming and grazing activities are unable to perform in full their functions of providing the main food commodities (wheat, meat and dairy products). In addition, agriculture and animal production are essentially activities with the potential to achieve increasing and sustainable growth on the basis of the natural resources and land available at the present time, provided that the systems and types of production used are consistent with their natural renewal. Observance of the three above considerations will inevitably require the implementation of an integrated and cohesive series of development activities that are primarily geared towards combating desertification by applying methods of management and conservation which match the natural conditions and environmental characteristics of each area. Fitting investments should also be made in the fields of infrastructure, ancillary and supplementary activities and other services with a view to expanding the options open to inhabitants so that they are not forced to harm their resources and land. The route employed should be to enhance the efficiency and uses of such resources and land by applying various systems and types of production, manufacturing and marketing which make it possible to carry out practical measures and arrangements that have the conservation of resources and land as their mainstay in the equation of satisfying the human needs of both present and future generations so as to strengthen the social and economic significance of the future role of farming and grazing activities.

2. Project of the twentieth century

In order to achieve these aims, it was crucial to explore means of balancing the relationship between the basic elements of civilization (human beings, water, arable land), which have an uneven geographical distribution, and subsequently use them in combination to attain the objectives and requirements of sustainable development with a view to achieving food security, as well as providing adequate and additional employment opportunities, protecting the environment and preserving renewed natural resources. This strategy was embodied in the implementation of one of this century's most important and greatest projects in the fields of environment and development worldwide, namely the Great Man-made River Project, being a practical step which inescapably aspired to achieve progress and prosperity by transforming agriculture from a subsistence activity into an economic activity pursued with a view to the enjoyment of well-being by the present and future generations.

3. Popular administration and participation

Popular awareness of desertification issues and the need to preserve and protect natural resources and land will endure as a major strategic pillar with a view to achieving the objectives and requirements of sustainable development. Consequently, identifying the obstacles to farming and grazing will continue to be a matter of importance, as will demonstrating the desired benefits and advantages of programmes and activities aimed at safeguarding

resources and land, developing their uses and exploitation methods and explaining these to the inhabitants of the various regions. In that connection, however, success will only be achieved by means of an effective and decisive management that first and foremost shows concern for and takes into account the social and economic circumstances of the inhabitants.

With its complete grasp and profound awareness of all such combined interactions and influences, this brand of management can successfully generate the positive and active participation of the inhabitants concerned, which begins with a sound diagnosis, continues through the stage of formulating and implementing the measures and arrangements needed to reduce the serious obstacles and pressures to which the fundamental elements of resources and land in general are exposed, and ends with appropriate development and investment activities. Inhabitants will consequently serve as a highly effective and influential element in the ultimate success of the national programme to combat desertification.

4. Investment of human capital

On a different note, with a view to alleviating the severe limitations of resources and land and reducing the pressures on them in order to provide conditions and means conducive to achieving the objectives of sustainable development, it is essential to employ techniques appropriate to the environmental conditions of each area through the use of training programmes which are essentially based on constant assessment and comparison of the available options. This will consequently ensure the effective and careful participation of inhabitants who are capable of the creation and innovation which comes of developing their own skills, their mental aptitudes and their management abilities, thereby reducing risk, enhancing efficiency and raising performance levels.

5. Key technical arrangements

Research and development plays a positive and effective role, beginning with more additional research and studies in order to clarify the issues which need to be resolved, and continuing with the pursuit of more scientific and technical knowledge about the different regions with a view to determining the agricultural, manufacturing and marketing methods most appropriate for each. This may be achieved by exploring the optimum use of the available resources and land through an integrated body of conservation and development measures matched to the natural and environmental conditions in each individual region so as to ensure that the systems are linked to achieve the model production limit, as reflected in continuous and growing economic revenues.

6. Establishment of legal principles

There will be a pressing and constant need to develop laws and legislative enactments to serve as an appropriate framework for the efforts made to combat desertification and achieve the objectives and requirements of sustainable development. The promulgation of such laws, legislative enactments, regulations and controls in this field will, however, be insufficient in itself, as it is also crucial to supervise their implementation, monitoring and follow-up. To that end, the various

inspection, protection and monitoring agencies require guidance concerning the significance and size of the different effects of desertification and its causes, as well as the potential role which they can play in alleviating the severe limitations and the ensuing pressures. Predictions of occasional spells of drought and shortages of natural resources in the affected areas are therefore required, as are adequate facilities and services for the inhabitants of such regions. Temporary and compensatory measures should also be taken to provide supplies of food and fodder.

MADAGASCAR

I. Environmental degradation in Madagascar, which is chiefly attributable to human activity and the constant push for development in all areas of life, is leading to adverse and unrealistic management of natural resources and changes in weather patterns. Alarming environmental disturbances, a reduction in productive capacity and the destruction of natural habitats are the principal causes for concern. These factors in turn are impacting negatively on the living conditions of the population, particularly the rural population, and exposing certain areas of the country to the threat of desertification.

The Malagasy Government is aware of this environmental degradation and has therefore adopted the World Conservation Strategy (1980) and subsequently drawn up its own strategy. Under Decree No. 84-445 of 14 December 1984, Madagascar adopted a National Strategy for Conservation and Sustainable Development focusing on the impact of human activity on the environment. This strategy addresses environmental issues in comprehensive terms, but implementation has remained patchy owing to the Government's limited resources.

The Government has launched a new initiative by adopting Act No. 90.033 of 21 December 1990, which established the Malagasy Environment Charter. This contains the general outlines of national environmental policy, namely:

1. Reversing the spiral of degradation into which Madagascar has been drawn;

2. Effecting a reconciliation between human beings and the environment;

3. Mainstreaming environmental policy into overall national development.

The vehicle for the implementation of the Act is the National Environment Action Plan (NEAP), comprising three five-year programmes. The objective is to promote development through sustainable use of natural resources and in particular to conserve Madagascar's biodiversity for the benefit of future generations.

The NEAP was launched in 1991 and is currently in its second phase. Through a combination of approaches (programme, regional and participatory) and its 15 component parts, this second phase takes account of most activities relating to desertification control.

II. After 30 years of economic decline, almost three quarters of the Malagasy population currently lives in poverty; 86 per cent of the poor live in rural areas. The Government has formulated a rural development strategy with the overall aim of improving living conditions.

In view of the predominantly agricultural and rural nature of the Malagasy economy, the rural population represents 85 per cent of the total population and agriculture accounts for 34 per cent of GDP. The situation in the countryside is steadily worsening owing to the mediocre performance of the agricultural sector and related activities. An overhaul of the physical context, institutional framework and modes of production in rural areas is therefore necessary, in addition to a redefined role for the State and a relaxation of the constraints on the agricultural sector, coupled with observance of the principle of sustainable environmental development.

The medium-term objectives of this rural development strategy are:

1. Food security;

2. Promotion of growth and enhanced competitiveness of the agricultural sector;

3. Reduction in rural poverty;

4. Long-term viability of the country's natural resources.

These strategic goals need to be fleshed out with specific and appropriate measures of benefit to the country. Accordingly, the Government is currently devising a rural development action plan in close cooperation with civil society and the donor community. The action plan will be highly participatory in nature. Technical working groups have travelled to different regions of the country in order to formulate the rural development action plan and the operational arrangements for implementing it.

Various rural development projects and programmes are currently being implemented, including:

1. The national agricultural research programme;

2. The national agricultural extension programme;

3. The irrigation systems renovation programme;

4. The technical assistance and rural finance programme.

III. Given the steadily worsening impoverishment of the Malagasy population, the following programmes to reduce poverty have been put in place:

- The national poverty reduction programme run by the United Nations Development Programme (UNDP), the principal aim of which is to improve the living conditions of the poorest sections of the population in southern Madagascar (Fianarantsoa/Toliary);

- The expanded nutrition and food security programme, which aims to reduce food insecurity and widespread malnutrition;

- The Development Fund.

IV. Various programmes have also been developed in other sectors, for example:

1. The energy sector development programme;

2. The national educational improvement programme;

3. The national health sector programme.

V. With specific reference to southern Madagascar, the area most affected by desertification and alternating famine and drought, the southern recovery programme is being implemented as part of the comprehensive development programme for that region. The programme is being financed by a consortium of donors; its objectives are food security, provision of drinking water, early warning of natural disasters and drought, environmental protection, soil reclamation, and encouragement and strengthening of the private sector.

These projects and programmes are nationwide in scope; their ultimate objective is to promote the country's sustainable development. However, various local and regional development projects are also being implemented with the support of donors and financial backers, mainly at bilateral level.

In the context of the various projects, programmes and action plans listed above, the United Nations Convention to Combat Desertification (UNCCD) strengthens Madagascar's position in the international strategy to promote sustainable development. This is because the innovative approach espoused by the Convention emphasizes a system of planning that is chiefly actuated by the local population and accords greater priority to local development (much more so than in the past), while at the same time promoting real partnerships nationally, regionally and internationally.

Madagascar signed the UNCCD in 1994 and became a Contracting Party in September 1997. Under the Convention, Madagascar has:

1. Organized information and awareness days in January 1996;

2. Established by ministerial orders a National Coordinating Body (NCB) under the supervision of the Ministry of the Environment;

3. Committed itself to drawing up and implementing a National Action Plan (NAP) to combat desertification.

The project to draw up and implement a NAP to combat desertification is therefore under way. Its objectives are:

- To promote the Convention at all levels;
- To compile and analyse previous and current strategies and activities relating to desertification control for use as guidelines to draw up the NAP to combat desertification;
- To draw up a NAP to combat desertification with a view to subsequently implementing it in or around the year 2000.

MALAWI

Malawi, a country of 119,140 square kilometres and 9.8 million people, is ridden with drylands of the Rift Valley floor. Almost 29 per cent of the population live in these ecosystems which has limited potential for rainfed agriculture, especially in maize production. It is the plight of the people living in these drylands of the Rift Valley floor that make the Convention to Combat Desertification relevant to Malawi. Malawi found it fit to ratify the Convention to Combat Desertification in June 1996.

Since the ratification in 1996 a multidisciplinary national steering committee has been established whose function is to provide leadership in the national action planning and implementation process of the United Nations Convention to Combat Desertification (UNCCD). So far the Committee has undertaken some sensitization campaigns of the UNCCD, produced some issues papers and is ready for the first stakeholders conference. Meanwhile, some initiatives are being studied with a view to incorporating them in the National Action Programme. Several policies have been reviewed and new laws enacted with a view to empower local communities in sustainable development and access to benefits accruing from investment of their time. These policies include agriculture, environmental management, forestry, fisheries, water development.

Financial allocations to Departments and line Ministries are declining due to debt servicing and a shift of policies, especially decentralization. This is happening at a time when proliferation of NGOs is taking place, some of whom are being supported directly by the traditional donors. In order to respond to some financial gaps, an endowment fund has been established with a window on combatting desertification. The fund will finance community orientated activities including research, management and development of natural resources as well as expanding alternatives to wood fuels and sustainable sources of employment and income, especially for women.

MALI

Efforts to integrate environmental issues in general, and that of desertification control in Mali in particular, into development plans, policies and programmes started in 1974 after the drought that afflicted all the ICDCS (Permanent Inter-State Committee for Drought Control in the Sahel) countries in 1972-1973. Since then, a number of initiatives, policies, strategies and programmes have been formulated, for example the national

decentralization policy, the national population policy, the poverty eradication strategy, the action plan for the advancement of women, the mining sector policy, the industrial sector policy, the small-scale production policy, the tourism policy, the communication policy, the education sector policy, the housing policy, the transport policy, the health sector policy, the national public health policy, the master plan for developing water resources, the master plan for rural development, the national forestry policy, and the domestic energy strategy. The most recent is the National Environmental Protection Policy (PNPE), ratified in May 1998. The objective of the projects and programmes falling within the scope of the PNPE is to contribute to the resolution of major environmental problems and the establishment of mechanisms necessary for collaborative management of environmental resources. To this end, the programme approach was given priority in order to reinforce the actions and experiments undertaken within this framework at regional and local levels and to optimize the efforts and resources of all the institutions, structures and actors involved.

The institutional framework of the National Coordinating Body (NCB) has recently been strengthened by creating a new structure, the Institutional Framework for the Management of Environmental Questions, consisting of an inter-ministerial committee, an advisory committee and a permanent technical secretariat. This institutional framework takes stock of the national environmental situation and submits proposals to the Government on measures to protect the environment and combat environmental degradation and desertification. It ensures that environmental factors are taken into account in the formulation of development projects and land planning schemes, and it guides the work of the sector-related structures involved in managing the environment and combatting desertification. Finally, it assesses the extent of implementation of international conventions, treaties and agreements ratified by Mali in the field of the environment and desertification control. The permanent technical secretariat/Institutional Framework for the Management of Environmental Questions (PTS/IFMEQ) reports to the Ministry of the Environment. It is funded by the State and various development partners including Germany, the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Development Programme (UNDP). The PTS/IFMEQ now has 10 technical executives from different ministries. Their training and backgrounds are different, yet they complement one another and are representative of the different sectors involved in desertification control. The modes of collaboration between the members of the NCB and the stakeholders they represent are meetings, debates and exchanges of views. Non-governmental organizations and representatives of local people are involved in all aspects of the work of the NCB through formal and informal meetings; the NCB also holds regular information-sharing and working meetings. At the beginning of each year, the NCB draws up a programme of work in the light of its responsibilities and assignments. As far as publicity is concerned, the NCB's capacity is still rudimentary, but it should be pointed out that a national system for disseminating information on desertification and environmental follow-up has been set up on the Internet, thereby making use of new information and communication technology. There are currently databases on agriculture, animal husbandry, forest resources, and hydro-agricultural planning and infrastructures. Information sharing takes place among numerous national structures which provide information on environment and desertification. In the field of legislation and regulation, a number of

measures need to be implemented to make good certain deficiencies in environmental protection, for example the inadequacy of discharge standards and regulations governing use of resources. These measures involve the diagnosis and definition of norms and rules concerning access to and utilization of resources. They comprise permission/prohibition of certain activities and monitoring/financial penalties. There is also the option to comprehensively ban an activity in the event of non-observance. Numerous tools will have to be developed, the most important of which are the drafting of an environment code (an essential element of the PNPE), the update and review of existing laws and regulations, and the introduction of environmental impact studies.

At the start of the process, the permanent secretariat (PS) of the National Environmental Action Plan (NEAP) organized missions to all regions of the country in order to inform and sensitize regional partners (i.e. technical services, communities, farmers' associations, grass-roots organizations, NGOs, development partners, etc.) about the objectives of the process, and also to check that the planned objectives were compatible with regional concerns. The most significant environmental problems were subsequently diagnosed. After considering these issues as a whole, the PS/NEAP/Development Information Centre (DIC) thought it necessary to provide all resource users with enough information to make them aware of the problems and also to identify solutions. Moreover, the UNCCD has been translated into several national languages and received wide circulation. In addition, PS/NEAP/DIC has translated the key ideas of the UNCCD and the major points of the launching forum of the NEAP/DIC into six national languages. All these instruments have been circulated widely at local level. In setting up the Regional Coordination Committee (RCC), the idea was to involve all the stakeholders involved in fieldwork (NGOs, technical services, associations, farmers' organizations, technical cooperation partners, research departments and especially communities). This involvement included a training session on the methodology for formulating action plans. Meetings and thematic workshops were frequently employed by RCC to involve partners (extended local cooperation for development, regional cooperation for development, NGOs and technical services). The consultations did not involve a specific group of stakeholders; they were open to all interested parties regardless of sex, age, or social and occupational status. In order to involve all partners in the process, the meetings were decentralized (districts, circles, regions, PS/NEAP/DIC). Throughout the process of drawing up the NEAP, resources were placed at the disposal of RCCs in order to maintain the momentum that had been built up. It is important to note that the PS/NEAP/DIC placed each region under the supervision of an adviser to the local governor for the duration of the process. The central authority merely provided support, advice and guidance.

Since Mali's ratification of the Convention, the Government has strengthened the permanent technical secretariat of the NEAP/DIC. One of the secretariat's main tasks has been to sensitize cooperation partners with a view to involvement/participation in drawing up and implementing the PAN. Germany has been designated the lead partner. Regular meetings have been organized between the donors themselves and between donors and the authorities. It has taken a year to involve partners effectively. A team of 10 partners was involved in funding the process at a general level, for example in holding a number of workshops/meetings and organizing the necessary

visits and consultations. They also provided necessary technical assistance. The Government regularly assesses this participation through various direct contacts and through liaison with the lead (permanent) partner. An informal advisory body of partners has been established with Germany as team leader. One technical adviser representing the team leader has been placed at the disposal of the permanent technical secretariat to provide day-to-day support.

An assessment of desertification control experiences has been carried out by the permanent technical secretariat of NEAP/DIC. This assessment, which was based on an evolutive analysis of actual achievements, highlighted constraints and made proposals for strengthening desertification control. The permanent technical secretariat of NEAP/DIC, on a participatory basis involving all the stakeholders, identified and analysed the main projects that are being implemented and listed their achievements and shortcomings. This exercise and other studies (numerous meetings between the institutions and stakeholders concerned) have made it possible to formulate national, regional and some local action plans, although it must be admitted that not all the results anticipated have been achieved, especially with regard to local action plans. The action plans formulated take account of previous experiences and past and/or existing action plans implemented by various institutions and stakeholders. They also aim to strengthen existing plans to ensure that environmental considerations are mainstreamed in a cross-cutting manner. Responsibility for the implementation of programmes is vested in all ministries whose remit involves one or more of the adopted programmes. Other partners active in the field of environmental management also have a responsibility in this area. It should also be noted that, in accordance with current policy guidelines, a minimum priority programme has been identified for implementation. It consists of priority actions under four national programmes of the PNPE namely: the National Programme for the Management of Natural Resources, the National Programme for the Harnessing of Water Resources, the National Programme for the Improvement of the Living Environment, and the National Programme for Environmental Information. In order to secure funding for these new projects, a round table conference of donors will be organized by the Malian Government at the end of May 1999. Training, particularly that of populations, is a key element in projects and programmes drawn up pursuant to the Convention (particularly the programmes submitted at the round table). The objective is to enable populations to acquire the techniques and technologies necessary for conservation and sustainable development of natural resources. A number of measures have also been taken to comply with the priority areas outlined by the Convention, for example the strengthening of local people's national resource management capacity, mandatory environmental impact studies, the establishment of the Ministry of the Environment and the PTS/IPMEQ, awareness-raising among decision-makers and the population as a whole, the creation of networks for research and dissemination of information, the creation of a system for disseminating environmental information and follow-up on the Internet (SCISE), the creation of rural structures for timber management, the implementation of the national poverty reduction policy, the establishment of a village development fund, market liberalization, and the reduction of taxes on exports. Within the framework of the joint management of transboundary resources recommended by the Sub-Regional Action Programme (SRAP/AO), Mali is involved in three projects, two of which have already been the subject of case studies. A consultancy project to finalize the work being done within this

framework is about to start. Mali took part in meetings to delineate and formulate the SRAP and preparatory workshops to establish scientific networks for water and soil conservation and transhumance, held in Bamako and Addis Ababa respectively. Decentralization makes communities accountable for their resources, just as the State is responsible for the resources which come within its jurisdiction. All current legislation takes this established fact into account. Information and training measures are being prepared for this purpose. With the establishment of rural communes, awareness of decentralization has become a reality. Administration has already been decentralized, particularly in the area of natural resources. Henceforth, stakeholders in development insist on being involved in the development of their region and thereby begin to participate actively in the different stages of planning, implementation, follow-up and assessment of projects. At the start of the process, an advisory committee consisting of different ministries, representatives of civil society and donor representatives was established. This committee met regularly with the PTS/NEAP/DIC in order to secure its effective involvement in the process.

The inter-ministerial committee has been less active, but, following the recent establishment of the Ministry of the Environment, internal partnership has been given renewed impetus. To date no formal arrangements have been worked out. With the recent establishment of the PTS/IFMEQ and the extension and harmonization of its range of activities, the consultation and coordination process has been improved both nationally and internationally. Investments have been made in the organization of workshops, studies, missions/conferences, documentation, staff and premises for NEAP/DIC, etc. The international partners are Germany, FAO, UNDP, the Club of the Sahel, the Sahara and Sahel Observatory (OSS), the World Bank, ICDCS, Canada, France, the Netherlands, Switzerland, and the United States Agency for International Development (USAID).

Following decentralization, local stakeholders now have the opportunity to negotiate directly with national or foreign partners. This opportunity has led to decentralized cooperation and the increased importance of joint ventures. The emergence of local development associations and NGOs is also an opportunity to access funding for desertification control. Although the situation is constantly changing, the lack of resources in the State budget for desertification control necessitates the mobilization of new sources of funding at national level. Accordingly, an ongoing debate is taking place on setting up a national desertification control fund. In line with the principle of decentralization, support has been voiced for the establishment of local desertification control funds, which could potentially be financed through a community charge. As for the mobilization of external resources, in addition to the proposed conversion of the external debt of countries with low income, including African countries, to development funds and poverty eradication funds, there is the Global Environment Facility (GEF), which is very hard to mobilize. Other funding mechanisms involving partnership agreements are being scrutinized. The National Bank for Agricultural Development (BNDA), village funds deriving from cotton or rice, NGO funds, and decentralized cooperation funds are some of the other local initiatives that should be mentioned.

At national level, the State has provided the National Forestry Policy with premises and technical personnel necessary for the formulation of the national action plan. It has also facilitated the process by mobilizing the relevant stakeholders. The Malian Government has been afforded considerable assistance by development partners through a variety of projects. Three partners have been conspicuous in their efforts: Germany, FAO and UNDP. Noteworthy financial contributions have also been made by the Netherlands, the World Bank, the Swiss Development Cooperation, the Club of the Sahel, OSS, and ICDCS. Total resources are estimated at about 700 million CFA francs.

In Mali, providers of environmental information fall into two categories: (a) various specialized technical services (meteorology, hydrology, agriculture) which collect information in a systematic and repetitive way as part of their mission. Their approach is analytical and statistical, and they also provide thematic databases; (b) networks and observatories for environmental monitoring (for example, ROSELT, Section B of the Natural Resources Management Project, DMP, the French Overseas Scientific and Technical Research Agency/Scientific Research Institute for Development Cooperation (ORSTOM/IRD)). These are managed by scientific organizations which monitor ecosystems and agro-systems in pilot areas and research the functioning and evolution of these environments, mainly from the point of view of environmental degradation and desertification. These networks are often integrated into larger international units. Their approach is systematic and goal-oriented. It should be noted that the Desertification Information System (DESIS) for Mali has been in the process of formulation since 10 November 1998.

The various initiatives which have been launched are currently showing encouraging results: an initial information pack consisting of the national desertification profile (stocktaking and other studies) has been drawn up and incorporated into the DESIS for Mali; an institutional kiosk involving all partners has been launched and is currently under construction. A prototype DESIS for Mali has been formulated and was submitted during the National Forum for ratifying the NEAP/DIC which took place from 28 to 30 May 1998 at the Amitié Hotel, Bamako. A project document on the National Environmental Information System (SNIE) and the National Environmental Information Network (RNIE) has been drawn up and will be submitted to donors. The Natural Resources Management Project has developed indicators that can be measured on a participatory basis with rural communities. These indicators are defined in relation to four types of major changes (major impacts): the natural resource management capacity of local communities, the socio-economic conditions of rural communities, the productive capital of natural resources, and the institutional (national) environment.

MAURITANIA

1. Mauritania faces a number of challenges resulting from desertification, drought and the after-effects thereof, which have led to (i) soil degradation, (ii) a reduction in the acreage under cultivation, (iii) the encroachment of sand dunes (over 70 per cent of total available acreage is covered by sand), (iv) rapid settlement by the formerly predominant rural population (over 51 per cent of the national population), and (v) galloping urbanization, particularly in Nouadhibou and Nouakchott.

This picture is complicated by international factors such as the increase in the price of staple commodities and fluctuations in the price of iron ore and fisheries products.

In the light of these geographical constraints and the demands imposed by the globalization of trade, during the last 20 years the Mauritanian Government has joined forces with its partners to identify and implement effective solutions to the challenges posed by desertification control, and the sustainable development and management of its natural resources. Mauritania's commitment is demonstrated by its accession in 1994 to the UNCCD, followed up by ratification in August 1996.

9. Before and after the adoption of the Convention, itself a binding legal instrument, the Government had embarked on multiannual programmes in various social and economic sectors focusing on comprehensive or sectoral strategies and plans backed up by action programmes based on a multisectoral approach.

Subsequently, following the implementation of the Conventions which underpin Agenda 21, Mauritania implemented new strategies based around a participatory approach by all stakeholders. These strategies concentrate on issues pertaining to development and environment and focus on the following areas:

Establishment of a framework conducive to the country's consistent development;

Due consideration of the urban/rural distinction in terms of quality of life;

Development of national resources involving the economic potential of two sectors, namely the traditional rural sector dominated by agriculture, livestock farming and harvesting of wild-growing fruit which is subject to the vagaries of the climate; and the more modern sector comprising mining, fishing on an industrial scale and irrigated agriculture, which is heavily dependent on imports;

Promotion of grass-roots development and capacity-building of public and private structures with a view to encouraging sustainable development and achieving the following objectives (Source: Mauritania Development Strategy, 1998-2000, public/private sector partnership March 1998):

1. Achievement of annual real GDP growth of 5.5 per cent. This translates into just over 63,000 ouguiyas (UM) per head or approximately $400 at current exchange rates;

2. Reduction of the current account deficit (ignoring government transfers) to 11.9 per cent of GDP by 2001;

3. Stabilization of the rate of annual inflation at 3 per cent by 2001.

The strategies and plans implemented before and after the entry into force of the UNCCD include the National Nature

Conservation Strategy (drawn up and adopted in 1987); the National Plan to combat Desertification (adopted by the Government in 1989), itself underpinned by the Multisectoral Desertification Control Programme (approved and adopted by the Government and subsequently by donors at the round table conference held in May 1992 in Nouakchott); and the National Strategy for the Advancement of Women (approved in 1995).

The multisectoral programme focuses on six priority areas with estimated funding of UM 15,000,000,000 or $71,428,571.43 (at a rate of UM210 to the dollar). These priorities are:

- The protection programme;
- The Water programme;
- The Energy programme;
- The Management and development programme;
- The Institutional and legal programme;
- The Support programme.

The mobilization of these funds will be used to reclaim 400,000 hectares of degraded land and implement other important measures to protect natural resources. The National Strategy for the Advancement of Women is intended to consolidate what has been achieved thus far and mainstream the recommendations of the Cairo and Beijing World Conferences. It has five core programmes:

- Improvement of the profitability of female labour;
- Increase in female participation in grass-roots development bodies;
- Adoption of a policy on children and the family;
- Formulation of an accompanying strategy for information, education and communication;
- Strengthening of the institutional capacity of the Secretariat of State for Women's Affairs.

4. Important measures were taken in the social, institutional, legal and regulatory spheres both before and after the adoption of the UNCCD. On 20 July 1991 the new Constitution came into force; it established democracy and a multi-party system, guaranteed civil liberties and personal freedom, and enshrined the fundamental rights of citizens.

Far-reaching transformations and reforms have also therefore occurred in the legal, economic and social spheres, focusing on the revision, formulation and adoption of a number of comprehensive, specific and associated statutes and regulations. These include:

- The ordinance on land reform;

- Legislation on wildlife and forestry management;

- The ordinances on prevention of and penalties for dumping nuclear, industrial and toxic wastes; national non-maritime zones; public hygiene; legal and tax rules on exploration for and exploitation of hydrocarbons; management and exploitation of mineral resources; and water resources liable to communal use;

- The Municipal Policy Act and associated declaration (1995).

Although most of these instruments are still not fully operational for want of a relevant implementing decree, they have nevertheless made possible the establishment of an evolving and coordinated framework for the promotion of grass-roots development and the involvement of all categories of stakeholders in the management of natural resources, as well as the democratization of access to and utilization of land in areas of water and agriculture resource development. They will also avert potential conflicts arising from access to and control of these resources.

The relevant Government structures and institutional bodies responsible for implementing these statutes and regulations, which play an important role in the formulation, planning and programming of policies and the implementation of sustainable development activities to combat desertification, have been established. These structures are the relevant ministerial departments and a number of coordination and decision-making bodies in the political, technical and operational fields:

- The Ministry of Rural Development and the Environment, the Ministry of Water and Energy, the Ministry of Industry and Mines, the Ministry of Trade and Tourism, the Ministry of the Interior, Posts and Telecommunications, the Ministry of Equipment and Transport, etc.;

- The National Committee for Environment and Development;

- The Technical Committee for the Environment and Development;

- The National Coordinating Body for the National Action Plan to Combat Desertification;

- The Advisory Working Group comprising representatives of all the stakeholders involved in the implementation of the UNCCD;

- The Regional Committees for Environment and Development based in the main town of each administrative region, operating on the same lines as the Technical Committee and the Advisory Working Group.

These bodies have an important role to play and are required to keep themselves informed, take political decisions, offer preliminary technical

advice on projects potentially damaging to the environment, and suggest operational activities for implementation within the framework of the National Action Plan.

The National Coordinating Body of the National Action Plan, which has received financial contributions of $268,000 from the United Nations Sudano-Sahelian Office (UNSO) and UNDP, $53,000 from the UNCCD secretariat, and 150,000 French francs from ICDCS, has been able to embark on joint work with all the structures referred to above and the stakeholders involved in implementing the UNCCD. This body has formulated and adopted a national communication strategy consisting of four thematic studies on institutional and legal issues, partnership, the challenges posed by water resource mobilization and management, mechanisms and indicators for follow-up and evaluation, and Mauritania's experience of desertification control.

Despite a clear-cut delineation of their functions and modes of participation, these bodies have been unable to undertake any bold initiatives. This is particularly the case in the National, Technical and Regional Committees for Environment and Development, and is basically due to the unstable nature of the institutions themselves and staffing problems rather than an underestimation of the importance of the Convention.

5. Following the entry into force of the Convention, most of the stakeholders involved, particularly NGOs representing certain social and occupational associations and target groups such as women and schoolchildren, have made a significant effort to contribute in a participatory spirit to the implementation of numerous activities under the National Action Plan. These activities include the organization of a National NGO Forum on raising awareness of the Convention (March 1997); the holding of training workshops for trainers; participation in and observance of the World Day to Combat Desertification and Drought, World Environment Day, World Food Day and the International Day to Eradicate Poverty, and observance of national Days on similar themes, the publication and dissemination of various materials, newsletters and sketches designed to secure maximum public awareness of the seriousness of desertification, which has reached crisis proportions in Mauritania and is evidenced by persistent drought, disruption of food production, the energy crisis and the crisis of forces of production.

6. The majority of development partners have responded to the Government's appeal and expressed their willingness, insofar as they are affected and using their own approach, to help combat desertification and alleviate the effects of drought. This response has made it possible to press ahead with certain initiatives launched before the Convention came into force. These initiatives are integrated and for the most part based on the Multisectoral Desertification Control Programme that comes within the scope of the Convention. They include the agroforestry projects in Assaba and the projects to prevent sand deposits, develop pastoral systems, encourage the use of improved wood stoves and promote village reforestation. It has also been possible to launch and promote new programmes incorporating an environmental perspective and a participatory approach by stakeholders in which rural target groups are in the forefront of the decision-making process.

The programmes referred to above underpin the initiatives and strategies that are being pursued through action plans within the framework of Agenda 21 and Sahel 21. These are backed by the principal donors and bilateral and multilateral cooperation agencies.

7. At the subregional level, Mauritania is paying special attention to the implementation of strategies and policies that have been formulated in conjunction with its partners in the Sahel and the Arab Maghreb Union (AMU), particularly as regards the protection of agro-sylvo-pastoral resources from principal threats and the protection of water resources, a concern that Mauritania shares with riparian countries. Relevant transboundary projects are being devised; others have already been launched and will be continued pursuant to the implementation of the UNCCD.

Mauritania is on the front line of desertification and the Sahara desert. It plays a crucial role in tracking and monitoring some of the principal threats to crops such as bird predators which breed and mature along rivers and locusts which live and breed in the desert.

8. As regards the financial assistance received and needed to implement the National Action Plan, internal and external efforts have mobilized a total of UM 35,161,510,000 or approximately $168,388,190.4 (at a rate of UM210 to the dollar). The money has been allocated as follows:

- UM 2,196,210,000 or $10,458,142.85 over the period 1994-1997 for the implementation of a number of projects launched and adopted before and after the entry in force of the UNCCD, compared with UM 15,000,000,000 originally sought from donors for the implementation of the National Plan to Combat Desertification. Financial allocations from the National budget account for UM 213,500,000 of this total, or 9.72 of the funds needed, with 1,858,000,000 or 84.6 per cent coming from external sources;

- UM 33,165,300 or $158,406,190.5 have been programmed for the period 1998-2001 under the public investment programme. The national budget has been called on to provide UM 1,652,000,000 or $7,866,666.66, equivalent to 4.95 of the total; UM 31,593,300,000 or $150,444,285.7143 are to be sought from various donors, or 95.03 per cent of the investment needed.

The total financial contributions received or needed clearly fall short of Mauritania's actual requirements in dealing with the twin scourges of desertification and drought.

Regarding benchmarks and indicators to measure progress in the implementation of the Convention, a number of Government and non-government structures are using relatively operational methods to keep track of and assess field work connected with studies and projects involving the management and development of national plant and water resources. Alongside these structures, other approaches for monitoring, processing and analysing information are envisaged.

The publication of newsletters, the sharing of experience and the preparation of sectoral reports by the various categories of stakeholders could provide an opportunity for the National Coordinating Body of the National Action Plan to make an annual assessment of national accomplishments in implementing the UNCCD.

Regionally, Mauritania is in the process of establishing a long-term environmental follow-up system (ROSELT) at two test sites (Nouakchott and Chinguitti) and launching a number of transboundary projects in villages located along the river border with Senegal, Mali and the Maghreb.

These projects are backed up by cooperation between OSS, ICDCS and Mauritania.

In the final analysis, desertification control is a long-term project requiring the mobilization of financial contributions far exceeding Mauritania's modest budget resources.

In Mauritania, as in most countries in the subregion, additional efforts need to be made both nationally and internationally with a view to expediting progress, satisfying the expectations of the population and minimizing the fragility and disequilibrium occasioned by desertification and progress towards sustainable national development.